



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

SOCIAL ORGANIZATION^{*}

ROBERT H. LOWIE
American Museum of Natural History

I

Like the generation of thinkers that preceded ours, we are living in an age of revolt, but the object of our revolt is different from theirs. Our predecessors fought tradition as arrayed against reason. We have the task of exorcising the ghosts of tradition raised in the name of reason herself. There is not only a folklore of popular belief, but also a folklore of philosophical and scientific system-mongers. Our present duty is to separate scientific fact from its envelope of scientific folklore. This duty has been recognized by workers in various fields. And so we have in philosophy James's protest against monistic mythology; in physics and chemistry Mach's protest against mechanistic mythology; in biology and anthropology a no less vigorous protest against evolutionary mythology. Monism, mechanism, evolution are doubtless valuable concepts; but they are valuable in proportion as they are free from scientific folklore.

Our present course of lectures is designed to help in the separation of anthropological fact from anthropological folklore. This is the more necessary because not only laymen but even scientists of neighboring fields—historians, economists, sociologists, social reformers—continue to use as definitely established truths anthropological theories that are now gracing only the refuse heaps of the modern anthropologist's laboratory.

In my own lectures, I will confine my attention to a single problem—that of the clan and the gens, or, to call both by a generic term, that of the one-sided exogamous kinship group, a group that traces descent either through the father or through the mother exclusively, and within which marriage is prohibited (exogamy).

^{*} Two lectures (in a course of four) delivered in January under the auspices of the Department of Anthropology, American Museum of Natural History.

I will outline the conception of this group in older anthropological literature. I will show why we secessionists revolt against that conception. And I will attempt to show how nowadays we grapple with the range of facts that that concept was intended to summarize.

The concept we are here concerned with has been most clearly defined by Lewis H. Morgan in his *Ancient Society*, a work that has molded the views of innumerable professional and non-professional students of anthropology on the social organization of primitive tribes. This is not the place to define accurately Morgan's place in the history of anthropology. To avoid misunderstanding, I will state at the outset that in my opinion that place will remain a high one. But we must distinguish between Morgan the observer, and Morgan the theorist; and in Morgan's theoretical work we must again distinguish between his unusual power to see the importance of certain facts that had escaped others, and the very ordinary power shown in his naïvely synthetic constructions. Morgan's observations have indeed been challenged in part, yet in almost every instance, not only with reference to the Iroquois but also as regards tribes he was less intimate with, they have been corroborated by later and more thorough investigation. We are, therefore, entitled to consider him a painstaking, trustworthy observer. On the other hand, Morgan's interpretation of human society as a whole was not only unduly colored by his personal observations among the Iroquois, but reflected the trend of his age toward artificial evolutionary schemes. To develop such a scheme requires more than average ability, but, contrary to current notions, it does not require a very high grade of ability, certainly not of *scientific* ability. This Morgan displayed in a far more convincing manner when he noted the character of the Iroquois kinship system as distinct from our own, defined it, and set about with truly Darwinian industry to determine its analogues the world over. This genuinely scientific and theoretically important undertaking was doubtless not so spectacular as the interpretative speculations he superadded to the facts, but it will be rated higher by future generations.

To attack our problem. In *Ancient Society* Morgan's general aim is to trace the history of social organization from the period of

savagery to that of latter-day civilization. This development, he contends, took place through a series of unconscious reformatory movements enforced by natural selection. Low down in the scale of savagery there was a period of intermarriage of brothers and sisters in a group. At a later stage this was prevented by forming social units that would include brothers and sisters (as well as many other members of the tribe), and prohibiting marriage between all members of the new units. These organizations were of two distinct types according to whether kinship was traced through the mother or the father: they were either what are now known as "clans" or what we now call "gentes." A clan consists of "a supposed female ancestor and her children, together with the children of her female descendents, through females, in perpetuity." A gens consists of "a supposed male ancestor and his children, together with the children of his male descendants, through males, in perpetuity." Both the clan and the gens would bar intermarriage of brothers and sisters, and also marriage of cousins, no matter how distant, belonging to the same kinship group. On the other hand, marriage was not thereby prevented between all blood-relatives. With female descent, for example, I should not be permitted to marry my mother's sister's daughters, because they belong to my own clan, but I might marry my father's sister's daughters, who would necessarily belong to another clan. Morgan believes that, once invented, the scheme of the one-sided exogamous kin group spread "over immense areas through the superior powers of an improved stock thus created." With the exception of Polynesia, it formed "the nearly universal plan of government of ancient society, Asiatic, European, African, American, and Australian."¹

To this notion of the one-sided exogamous kin group Morgan added a theory of how that group developed from an archaic to a relatively modern form. In order to secure "the benefits of marrying out with unrelated persons," it would obviously be immaterial whether kinship is reckoned on the mother's or father's side, so long as an equal number of relatives were prevented from mating.

¹ *Ancient Society*, pp. 27, 63, 74, 377-79. I am using the term "gens" not in Morgan's sense, but in that now common among American ethnologists.

But Morgan holds that at the time when the one-sided exogamous group originated "marriage between single pairs was unknown, and descent through males could not be traced with certainty" (p. 67). Hence, he contends, in the archaic form of the kin group, kinship could be reckoned only in the maternal line, which also determined inheritance. When the paternity of children was assured, Morgan assumes that fathers revolted at their children being disinherited by the clan rule of inheritance, and in this way descent in the female line was overthrown and patrilineal descent substituted: in modern terminology, the clan was changed into a gens. Such, at least, is Morgan's account for the change among the Greeks and Romans (p. 345). For the Indian tribes with gentes he does not venture to suggest throughout the same motive for the development of the gens from the clan. Speaking of the Siouan family, he writes: "It is surprising that so many tribes of this stock should have changed descent from the female line to the male, because when first known the idea of property was substantially undeveloped, or but slightly beyond the germinating stage, and could hardly, as among the Greeks and Romans, have been the operative cause. It is probable that it occurred at a recent period under American and missionary influences" (p. 157). In general it may fairly be said that Morgan regards descent traced through the father as a quite recent institution, and believes in the ancient universality of the clan among North American Indian tribes (e.g., p. 177).

It is my intention to test Morgan's theory by the Indian data on which it is primarily founded. We may begin our test with the two most tangible questions that develop in connection with Morgan's scheme. Was the one-sided exogamous kinship group really a universal institution among the natives of North America? And did the exogamous gentes found among them develop uniformly out of exogamous clans? These questions have been answered by Dr. Swanton,¹ in the light of modern investigation, and while still later research has corrected his statement of the case in detail I find myself in full agreement with his general conclusions.

In answering the first question it would not serve our purpose to enumerate the tribes that have exogamous kinship groups and set

¹ "The Social Organization of American Tribes," *American Anthropologist*, 1905, pp. 663-73.

off against them the tribes that have not. For in this manner the real meaning of the facts would often be obscured through lack of weighting. For the question of the ancient universality of the exogamous kinship group it is not equally significant whether the institution occurs among two quite unrelated tribes or among two tribes which, like the Hidatsa and Crow or some of the Southern Siouan tribes, have only branched out from a common ancestral tribe during the last four or five centuries. And obviously the recent adoption of a clan or gentile system, which in a fair number of instances is demonstrably a result of borrowing from neighboring tribes, is of no importance from this particular point of view. Fortunately the essential facts can be expressed in a somewhat summary fashion, owing to the geographical continuity of the tribes possessing the system in question. We find it, roughly speaking, in the greater part of the United States, east of the Mississippi, and some of the adjoining Canadian territory; among the Caddo and Southern Siouan tribes of the Plains, as well as among several of the Northwestern peoples in the same area; in New Mexico and Arizona; on the coast of British Columbia and Alaska and in part of the Northwest coast hinterland. There are thus four fairly continuous areas within which the one-sided exogamous kin group is known to exist. In the remaining part of North America north of Mexico no such institution has been discovered. Among the Eskimo, throughout the Mackenzie River and Plateau areas, as well as in nearly all of California and several of the Plains tribes, diligent inquiry has failed to reveal any trace of such an exogamous system. It cannot be supposed that the system did exist in these regions but has escaped the notice of observers. For there is nothing esoteric about the rule that kin must not intermarry; and where exogamous groups occur the social activities connected with them are so prominent that, according to the experience of American field workers, their existence is very readily ascertained. The supporters of Morgan's views must, therefore, reckon with the fact that the supposedly universal organization simply does not exist in a very large part of North America. It might be asserted that the system had once existed everywhere, but that in certain districts it has disappeared. But this remains a baseless assertion in the

absence of any proof that such a process has occurred and in the absence of any reason for such a process of degeneration in the regions concerned. It cannot be maintained either that the tribes in question have advanced beyond the clan or gentile stage. When we compare the culture of the Shoshone, Paiute, Thompson River Indians, and others lacking the one-sided exogamous kin group with the Pueblo Indians, Iroquois, Omaha, and others possessing the system, it is at once apparent that whether from the point of view of industrial arts, social life, or ceremonial activity the tribes possessing the system are the more advanced. Swanton has rightly emphasized the fact that almost all the tribes with a clan or gentile organization are agriculturists, while the rest are almost all non-agricultural. The weight of such considerations as these has led Frazer—in other ways a typical representative of the classical school in anthropology—to reject Morgan's position and to admit that the stage of the exogamous clan or gentile system had never been attained by "the more backward members of the Redskin family."¹

This statement of the facts must not, however, be interpreted to mean that the tribes in question represent a stage preceding that of the clan in Morgan's scheme. For in that case we should expect no definite restriction of marriage, even between own brothers and sisters,² while on the contrary we almost uniformly do find additional restrictions based on consanguinity. To cite only a few random examples: Among the Central Eskimo, marriages of cousins, nephews and aunts, nieces and uncles are prohibited.³ Cousins are forbidden to marry among the Thompson River Indians, and even second-cousin marriages are disapproved.⁴ In the Nez Percé tribe there were no restrictions of marriage except in the case of relatives, but even second or third cousins were not allowed to marry.⁵ In these cases, of course, a superadded one-sided exogamous kin system would not "secure the benefits of marrying out with unrelated

¹ *Totemism and Exogamy*, III, 1-3.

² Except in so far as the Australian four-class system prevailed, which, however, did not prevent first-cousin marriage (*Ancient Society*, pp. 425, 503).

³ Boas, "The Central Eskimo," *Sixth Annual Report, Bureau of Ethnology*, p. 579.

⁴ Teit, *The Thompson Indians of British Columbia*, p. 325.

⁵ Spinden, *The Nez Percé Indians*, p. 250.

persons," because these benefits are already secured by existing marriage restrictions based on bonds of consanguinity. Thus the tribes in question in no way fit into Morgan's scheme of social evolution. They are not more advanced than the tribes possessing exogamous kin groups, for their general culture is undoubtedly lower. But neither are they so low in their social customs as to require an exogamous kin system for the retrenching of consanguine marriages. If anything, we should have to say that in this particular point they are higher, that is, nearer to our own mode of conduct, than the tribes organized in exogamous kin groups as conceived by Morgan.¹ It might still be argued that tribes may advance very unequally in different departments of culture; that therefore the loosely organized peoples may have lagged behind in their economic and industrial life while forging ahead of the tribes with clans or gentes in their social usages; that therefore they did once possess clans or gentes but have passed beyond that stage. The general principle on which such an argument would rest is sound, but its application is highly unconvincing in the present case. It would never be applied except to save the endangered hypothesis, involving as it does an appeal not to any observable facts, but to our ignorance of unobservable ones. Accordingly, we may dismiss it and sum up our conclusion to the effect that in North America exogamous kin groups, instead of being universal, were absent from a great many tribes, and that these for the most part possessed a less complex culture than those who had this institution.

Let us now turn to our second problem. Has the history of the one-sided exogamous group in North America been the origin and partial persistence of the archaic clan and its partial transformation into a gens? In other words, have all the gentes found among our Indians been preceded by a clan system? It will be best to consider first the mechanism by which Morgan conceives the change to have occurred and then the question of fact involved.

Roughly speaking, we find the gentile (as opposed to the clan) system among the Central Algonkin, Blackfoot, and Southern Siouan Indians. For the last-mentioned tribes Morgan suggests, as already noted, that the hypothetical change occurred under

¹ This conception of Morgan's will, however, prove to be erroneous.

American and missionary influences. This suggestion, however, is anything but convincing. We know of a number of instances where civilization has introduced novel social arrangements among Indian tribes, but of none where it has produced Morgan's hypothetical development. Among the Crow, for example, the government has introduced a patrilineal rule of property inheritance, but the native rule of maternal descent continues to hold for clan names and affiliations. The Iroquois have adopted the system of passing on surnames given by whites from father to son, but the ancient matrilineal system remains in full force. The Crow have probably been subject to white influence for as long a period as the Southern Siouan tribes, and the Iroquois doubtless for a much longer period. It seems highly improbable that within the short period of something like a century contact with civilization should have caused a considerable number of tribes not merely to adopt the white way of reckoning descent in matters that would be of moment in their dealings with whites, but to be so thoroughly imbued with the point of view of the whites as to adopt the alien mode of tracing lineage in all parts of their social system. The Mandan, of whom not a dozen full-blood members survive at the time of writing, still reckon tribal affiliation according to the matrilineal scheme; children of Mandan mothers and Hidatsa fathers are Mandan; children of Hidatsa mothers are Hidatsa. Morgan's suggestion as to the cause of change of descent among Siouan tribes may therefore be dismissed as unsatisfactory.

With reference to the Algonkian Shawnee, Morgan makes a suggestion more in accord with his general scheme of development (p. 169). Instead of ascribing the change of descent to civilized influence, he is here inclined to assign an internal cause—the wish to enable a son to succeed his father as chief, and to enable children to inherit property from their father. But, repeating in essence the foregoing remarks, we must insist that both these questions—descent of office and descent of property—do not necessarily affect the fundamental matter of reckoning lineage. The Crow illustration cited above fits in here also, for it is manifestly a matter of indifference whether the rule of inheritance is changed from alien or indigenous causes. The question is whether a change in the rules

of property inheritance from the maternal to the paternal line is itself a cause of changing clan affiliations into gentile affiliations; and there seems to be no evidence for this alleged causal connection.

This does not answer the question of fact whether, regardless of what causes may have operated, the gens is a development from the clan. Morgan's proof consists essentially in pointing out that while certain tribes have a gentile system other members of the same stock have clans. This is of course a two-edged argument that may with equal force be used to prove that clans developed from gentes. From the fact that Mandan, Hidatsa, and Crow reckon descent in the female line, Morgan argues that the Ponka, Omaha, Iowa, and Kaw formerly reckoned descent in the same way (pp. 155 ff.), all these tribes speaking Siouan languages. So, from the occurrence of female descent among the Delaware, Morgan infers "its ancient universality in this form in the Algonkian tribes" (p. 172). To be sure, this conclusion is supported by some additional data. The Delaware are declared to be "recognized by all Algonkian tribes as one of the oldest of their lineage," though it is safe to say that many Algonkian tribes were blissfully ignorant of the very existence of the Delaware in Morgan's time. Morgan furnishes better evidence in citing cases of several Algonkian tribes with male descent where nevertheless the chief's office was passed, not from father to son, but from maternal uncle to sister's son (pp. 166, 170). However, these cases are very few, have not been corroborated by later inquiry, and admit of other explanations. For example, there may be special rules for the inheritance of certain offices distinct from those which otherwise hold. The co-existence of different rules of descent for different social groups is well established in various primitive tribes. Thus, in Uganda descent of clan membership was patrilineal for all except princes of royal blood, who were always reckoned of kin with their mother. Considering that even with the most favorable interpretation of the cases cited by Morgan we are still confronted with a considerable number of tribes with paternal descent and no trace of any other system, we must conclude that Morgan has not established his scheme of development inductively but deduced it from his *a priori* postulate of unknowable fatherhood in archaic times.

This brings us face to face with a most important theoretical problem. We have indeed shown that Morgan has not proved his case from the North American data; but he may nevertheless be right if others have established the general law that matrilineal descent precedes paternal descent. Extending our inquiry beyond the American data, we must admit that until recently most sociologists and anthropologists deduced this sequence from such postulates as the uncertainty of fatherhood among primitive conditions. Tylor's point of view was doubtless in large measure determined by such considerations, but he supports it on a more solid basis of fact than is usually the case, and accordingly it will be best to consider his reasoning in some detail. Advancing what he himself characterizes as a geological argument, he holds that

. . . . the institutions of man are as distinctly stratified as the earth on which he lives. They succeed each other in series substantially uniform over the globe, independent of what seem the comparatively superficial differences of race and language, but shaped by similar human nature acting through successively changed conditions in savage, barbaric, and civilized life.

Tylor groups primitive tribes under three headings, corresponding to successive cultural strata: those with a maternal system of descent, those in which both maternal and paternal rules of descent coexist, and those with a purely paternal descent. He then examines, with reference to their occurrence in these strata, certain social customs—notably the remarriage of widows and the “couvade.” His treatment of the latter case will suffice to illustrate the method of reasoning followed. The couvade is the practice (found most conspicuously in some parts of South America) by which “the father, on the birth of his child, makes a ceremonial pretense of being the mother, being nursed and taken care of, and performing other rites, such as fasting and abstaining from certain kinds of food or occupation, lest the new-born should suffer thereby.” Tylor finds not a single instance of this strange usage among purely maternal peoples. In the maternal-paternal condition there are not less than twenty cases, while in the paternal the number dwindles to eight. From this Tylor infers that the purely maternal stage is the earliest because there is no survival of the couvade from other stages as there is in paternal society.

Just as the forms of life, and even the actual fossils of the Carboniferous formation, may be traced on into the Permian, but Permian types and fossils are absent from the Carboniferous strata formed before they came into existence, so here widow-inheritance and couvade, which, if the maternal system had been later than the paternal, would have lasted on into it, prove by their absence the priority of the maternal.¹

In support of Tylor's theory, that matrilineal institutions precede patrilineal descent, concrete evidence of all kinds has been adduced. Among the most recent writers, Rivers has expressed the conviction that this sequence holds for Oceania.² On the other side, American ethnologists have appealed to the case of the Kwakiutl of British Columbia, where there is assumed to have taken place a change in the contrary direction. According to Professor Boas, the Kwakiutl, like the tribes of Oregon, Washington, and southern Vancouver Island, once lived in village communities with paternal descent. Owing to the influence of the more northern Pacific tribes, whose system is matrilineal, the Kwakiutl grafted the northern principle of descent on that of the south, with the result that certain privileges are inherited in the paternal line and a much larger number are obtained by marriage through an intricate method that insures maternal descent.³ But although the Kwakiutl facts are very interesting, it is highly doubtful whether they have the theoretical significance ascribed to them. It is, in the first place, worth noting that they represent, in Tylor's terminology, not a maternal but a maternal-paternal stage. At best, therefore, they yield evidence of change from a purely paternal to a *mixed* condition. Secondly, maternal descent, so far as it prevails, seems to be restricted to the inheritance of property, while the reckoning of a child's affiliation seems to be indeterminate, as we have been more recently informed by Boas that a child is reckoned as belonging to both his father's and his mother's family. Thirdly, it is a matter of grave doubt whether the Kwakiutl units

¹ "On a Method of Investigating the Development of Institutions, Applied to Laws of Marriage and Descent," *Journal of the Anthropological Institute*, XVIII (1889), 245-69.

² "Survival in Sociology," *The Sociological Review* (1913), pp. 293-305.

³ Boas, "The Social Organization and the Secret Societies of the Kwakiutl Indians," *Report of the United States National Museum* (1895), pp. 334-35.

of which maternal-paternal descent may be predicated correspond to the type of unit to which Morgan, at all events, applies the sequence advocated by himself and Tylor. For Morgan is speaking all the time of *exogamous* units, whether clans or gentes, and among the Kwakiutl there seems to be no definite rule of exogamy but only a preference for marriage out of the group, and even this is denied in a later statement.¹ Finally, the Kwakiutl conditions are so specialized that adherents of the Tylor-Morgan theory may well regard them as exceptional; and even if the change from paternal to maternal descent be admitted, it is possible to suppose a pristine stage of matrilineal reckoning preceding the patrilineal village communities.

For these reasons the Kwakiutl conditions do not seem to furnish a favorable test case. Nevertheless, they embody the principle that forms the most vital objection to the classical theory as to rules of descent. For the Kwakiutl have developed their system not solely through internal growth but through contact with other tribes. The far-reaching influence of such connection with neighboring tribes generally has been realized to an increasing degree by modern anthropologists, and it obviously interferes with the doctrine of parallelism advanced by Tylor. For, granting that on account of the similarity of human nature, human institutions *tend* to succeed one another "in series substantially uniform over the globe," the borrowing of institutions would in an indefinite number of cases produce an abnormal sequence. We cannot even assert that where the observed sequence corresponds to the theory the result is due to uniform causes producing parallel evolution. Among the Carrier and Babine Indians there is matrilineal descent. As the majority of the Northern Athapascans, of whom these tribes form part, have a loose organization, it may be safely assumed that the Carrier and Babine once shared this sociological characteristic, provided we can indicate the conditions that in their case produced a change. We thus seem to have an illustration of the evolution of a clan system from the "earlier and less organized and regulated condition" postulated by both Morgan and Tylor. But the

¹ Boas, *Annual Archaeological Report*, Toronto, 1905, pp. 239-40; Goldenweiser, "Totemism, an Analytical Study," *Journal of American Folk-Lore*, XXIII (1910), 187, 213.

conditions that produced the change were not so general as the psychological constitution shared by humanity, but lay in the geographical contiguity of the Northwest Coast Indians, whose social organization was simply copied by the tribes in question. Accurate information as to the actual process of cultural development has largely shattered the belief once held in the necessity of parallel evolution among unrelated tribes. Many ethnologists now hold that historical processes are unique in character, that every phase of human history is so complicated by individual traits that no laws of historical development can be framed. This view has so deeply affected modern anthropology that even in quarters peculiarly liable to classical influence a far more cautious formulation is now in vogue. It is no longer contended that every gentile system has superseded a clan system, but merely that *if* the rule of descent changes at all, it changes from matrilineal to patrilineal descent. Thus, N. W. Thomas writes:

. . . whereas evidences of the passage from female to male reckoning may be observed, there is virtually none of a change in the opposite direction. In other words, where kinship is reckoned in the female line, there is no ground for supposing that it was ever hereditary in any other way. On the other hand, where kinship is reckoned in the male line, it is frequently not only legitimate but necessary to conclude that it has succeeded a system of female kinship. But this clearly does not mean that female descent has in *all* cases preceded the reckoning of kinship through males. Patrilineal descent may have been directly evolved without the intermediate stage of reckoning through females.¹

And expressing a still more acceptable view, Cunow writes:

Die meisten der heutigen vaterrechtlichen Halbkulturvölker haben sicherlich einst, wie sich deutlich aus ihren Rechtsbräuchen und Verwandtschaftsbezeichnungen nachweisen lässt, das Mutterrecht gekannt; aber das besagt noch nicht, wie den Vertretern der zweiten von Müller-Lyer genannten Theorie eingeräumt werden muss, dass das Mutterrecht eine Institution ist, die sich bei *allen* Rassen und Völkern ohne Unterschied auf gewisser Entwicklungshöhe einstellt. Unter besonderen Umständen mag das Mutterrecht ganz gefehlt haben oder doch die Mutterrechtsperiode von relativ kurzer Zeitdauer gewesen sein.²

From this modern point of view there is thus no reason to suppose that the Blackfoot, Central Algonkian, and Southern Siouan

¹ Thomas, *Kinship Organizations and Group Marriage in Australia*, p. 15. Also cf. Marett, *Anthropology*, p. 169.

² Cunow, *Zur Urgeschichte der Ehe und Familie*, pp. 38-39.

tribes ever possessed a clan system preceding their present or recent gentile system. Their general cultural condition, whatever may be the value of such a comparison, does not show a higher stage than that of maternally organized tribes; of the latter, indeed, the Pueblo Indians are manifestly superior to any of the patrilineal tribes. Considering the modified form in which such sane students as Marett, Cunow, and Thomas now present the classical theory of father-right and mother-right, we may safely say that there is no reason why the patrilineal tribes of North America could not have developed their system directly from a loose organization without passing through the hypothetical intermediate stage. Summing up, therefore, our reply to the two questions set at the beginning, we may say:

1. It is as certain as anything can be from the nature of the case that the one-sided exogamous kin-group system, whether in the form of clans or gentes, was not universal among North American tribes.
2. It is entirely unproved that those Indian tribes possessing a gentile system previously had a clan system.

II

In the preceding discussion little has been said of what is really more important in Morgan's treatment than either the geographical distribution of one-sided kin groups or the relative priority of different forms of these groups—Morgan's notion of what the kin group really represents. There can be no doubt that in Morgan's mind it was primarily not only a marriage-regulating agency (pp. 74, 378), but *the* marriage-regulating agency, preceding a prohibition of marriage between blood-relatives generally. It was, moreover, the only original type of social unit he recognized in primitive society beyond a certain stage and before the development of political society (p. 63). Finally, it was everywhere the same (*ibid.*).

Every one of these points is open to criticism. I shall first endeavor to show that blood-relationship operated as a bar to marriage independently of the origin of the one-sided kin system.

If Morgan's view of the kin group were correct, tribes possessing

this institution ought, in the first place, to consider marriage with the most distant cousin belonging to one's own group as incestuous as marriage with an own sister, for the exogamous rule according to hypothesis was a bar to brother-sister marriages only indirectly, inasmuch as brothers and sisters were included in the number of kinsfolk among whom marriage was tabooed. It is true that there are cases where union with a fellow-member of the same kin group is regarded as incest, even where there is no trace of blood-relationship between the mates. Among the Haida, for example, "so close was relationship held to be between persons of the same clan, that marriage within it was viewed by them almost as incest is by us."¹ But in other cases there is no such feeling. The Crow and Hidatsa have preserved their matrilineal system to the present day, the former still considering their clans exogamous. Yet transgression of the exogamous rule is a matter for ridicule not for punishment, is considered improper rather than criminal, and there is no evidence that any other point of view was ever taken by the natives.² The same, according to Dr. Goldenweiser, applies to Morgan's own Iroquois: mild reproof, not abhorrence, was meted out to the offenders. In these tribes marriage with an unrelated clansman would not begin to compare in offensiveness with marriage to a clansman who was a near blood-relative.

It may of course be urged that the differentiation of clansman and blood-relative is recent, but the argument may be supplemented by another. Morgan's theory presupposes not only that all members of a kin group are equally barred from marriage, but also that marriage with members of other kin groups is permitted regardless of ties of consanguinity. This corollary is demonstrably false for the present time in a great number of cases, and with it falls the theory from which it is deduced. Among the Crow, marriage with a near relative on the father's side is as strictly tabooed as marriage with a near relative within the clan. The same applies to the maternally organized Creek,³ to the Navaho, Iroquois, and

¹ Swanton, *Contributions to the Ethnology of the Haida*, p. 62.

² Lowie, *The Social Life of the Crow Indians*, pp. 188 f.

³ Swanton, "A Foreword on the Social Organizations of the Creek Indians," *American Anthropologist* (1912), p. 596.

Zuñi.¹ Among the Omaha, while a man must marry outside of his gens, he is also required to marry outside of his mother's gens.² The same, to choose an example from an entirely different area, applies to the patrilineally organized Baganda of East Africa.³ Among the Australians of Queensland blood-cousins are not allowed to marry though they belong to otherwise intermarriageable groups.⁴

Against this twofold argument the only possible answer is that the kin-group affiliation was in each case primary; that the attitude toward marrying a related clansman, as compared with that toward marriage with an unrelated one, and the objection against marriage with related members of other clans developed *after* the feeling against kin intermarriage. Here it may be noted in the first place that absolutely no evidence exists for this view; it is pure dogma. On the other hand, there is good evidence for the reverse order of development. As noted above, it is precisely among those North American Indians possessing the simplest culture that ties of blood-relationship, and not of one-sided kinship, act as a bar to marriage. Examples could be drawn from among tribes of other continents. Thus, among the Kai of New Guinea, marriage between a brother and sister is forbidden, though nothing is said of any kin restriction. In the same area the Jabim prohibit unions between children of a brother and sister.⁵

There is even more direct evidence. In several instances it appears that the exogamic character of the clan or gens is derived from the feeling that all fellow-clansmen or gentiles are related by blood. Among the Blackfoot,

when a proposal for marriage has been made, the relatives of the girl get together and have a talk, their first and chief concern being the question of blood relationship. Naturally, the band [gentile] affiliations of the contracting parties cannot be taken as a criterion, since both may have very near relatives in several bands and cousins of the first degree are ineligible. Should the contracting parties belong to the same band but be otherwise eligible, the marriage

¹ Swanton, *American Anthropologist* (1905), pp. 667-68.

² Dorsey, "Omaha Sociology," *Third Annual Report, Bureau of Ethnology*, p. 257.

³ Roscoe, *The Baganda*, p. 128.

⁴ Roth, *Ethnological Studies among the North-west-central Queensland Aborigines*, p. 69.

⁵ Keysser and Zahn, in Neuhauss, *Deutsch Neu-Guinea*, III, 89, 299.

would be confirmed, though with some reluctance, because there is always a suspicion that some close blood relationship may have been overlooked. Thus, while this attitude is not quite consistent, it implies that the fundamental bar to marriage is relation by blood, or true descent, and that common membership in a band [gens] is socially undesirable rather than prohibitive. . . . In any event, the attitude of the Blackfoot themselves seems to imply that the band [gentile] system came into existence after the present marriage customs and adapted itself to them rather than they to it.¹

A still more striking case is furnished by the Todas of Southern India. The Todas, according to Rivers, have a general term, *pūliol*, for those relatives whose intermarriage is prohibited, including some that belong to the same gens and some who do not. A man casting about for a mate classified women as either *pūliol* or not, "and it seemed to me in several cases as if it came almost as a new idea to some of the Todas that his *pūliol* included all the people of his own clan [gens]." A Toda

has not two kinds of prohibited affinity, one depending on clan [gentile] relations, and another on relations of blood-kinship, but he has only one kind of prohibited affinity, to which he gives the general term *pūliol*, including certain kin through the father and certain kin through the mother, and there is no evidence that he considers the bond of kinship in one case as different from the other as regards restriction on marriage.

The fact that the Toda includes all those kin whom he may not marry under one general term, and that the kin in question include members both of his own and other clans [gentes], goes to show that the Todas recognize the blood-kinship as the restrictive agency rather than the bond produced by membership of the same clan [gens].²

That is to say, among both Blackfoot and Todas such gentile exogamy as occurs is not a primary but a derivative phenomenon—is merely a function of the primary phenomenon, to wit, of restriction on the basis of blood-relationship.

To sum up. Restrictions of marriage based on blood-relationship apart from one-sided kinship coexist with kin-group exogamy. Restrictions of marriage due to blood-relationship exist where kin exogamy does not occur, that is to say, in North America at least, among the tribes with the most primitive culture. Finally, there

¹ Wissler, *The Social Life of the Blackfoot Indians*, pp. 19-20; also in *Current Anthropological Literature*, I, 15-16.

² Rivers, *The Todas*, pp. 509-10.

is positive evidence that in some cases kin exogamy is a corollary of restrictions due to blood-relationship. The conclusion seems warranted that clan or gentile exogamy is a phenomenon superimposed on prohibitions of incest in our sense.

Let us now turn to the question whether the clan or gens is really the prototype of all social units in North American Indian society. Morgan found that among the Seneca-Iroquois the eight clans of the tribes were grouped in two divisions of four each. These larger divisions or "phratries," he argued, were nothing but overgrown clans that had become subdivided, the subdivisions preserving a consciousness of their kinship.¹ As association of clans occurs without a dual grouping I propose to call any such association a "phratry," and will call "moiety" one of two complementary divisions of a tribe, regardless of its relations to whatever lesser divisions may coexist with the moieties. In my terminology the question then arises: Did the Seneca moieties develop from the Seneca clans by a process of subdivision?

In order to solve the problem, let us consider the facts as presented by Morgan and Dr. Goldenweiser. The Bear, Wolf, Beaver, and Turtle clans form one moiety; the Deer, Snipe, Heron, and Hawk the complementary moiety. While the clans bear animal names, the moieties are nameless. At the present, and indeed this even applied to Morgan's time, the moieties are not exogamous, but there is evidence that they were exogamous long ago; the clans remain exogamous even today. Each clan has a set of individual names distinctive of its members, and there is a rule that none of these names shall be borne by more than one person at a time. The moieties do not possess distinctive sets of names, but on their part exercise certain functions not shared by the clans. At a ball game the division of players and of their supporters in betting was by moieties; at tribal councils the chiefs of the two moieties sat on opposite sides, and voting on such a subject as the confirmation of a new chief was by moieties; at a funeral the moiety complementary to that of the deceased conducted the ceremonies; finally, there were obscure religious functions connected with the phratries.

¹ *Ancient Society*, pp. 88, 89, 91, 99.

These being the essential facts, what do we learn from them respecting the segmentation of two primary clans into eight? Before answering this question, let us try to determine whether we have any evidence for the segmentation of social units. Such evidence undoubtedly exists. Among the Onondaga-Iroquois, there is not only a Big Snipe but also a Little Snipe clan. If these were primarily distinct social units, we should expect to find that their sets of individual names were distinct, this being a characteristic of the clans of all the confederated Iroquois tribes. But the clans in question share the same set of names, whence their essential unity may safely be inferred. In other tribes additional examples of segmentation could doubtless be adduced. Where different clans are named for animals of the same genus but for different species of that genus, there is at least some presumptive evidence for segmentation (though never more), and where the moiety bears the name of a predominant clan or gens within that moiety the same applies, though here the actual demonstrative value of the evidence is even less.

However, in the case of the Iroquois it is not at all clear why the moiety and the clan should be supposed to be genetically related. Either the moiety was not formerly exogamous—then there is no functional similarity between moiety and clan at all; or, as according to Morgan and Dr. Goldenweiser it is reasonably certain, the moiety was once exogamous. Then, also we are not justified in saying that *both* units were exogamous. For, at the time the moiety was exogamous, the clan was by logical necessity exogamous as a part of the exogamous moiety, while its distinctively *clan* characteristics may have had nothing to do with exogamy.¹ The fact that when the exogamous rule of the moiety broke down it was limited to the clan proves nothing as to the unity of the two organizations. For in Australia, as Cunow shows, the marriage-regulating functions of the classes have in some instances been transferred to the genetically quite different totem kin units. It is true that an indefinite number of excuses can be given why proof of connection between the Iroquois moiety and clan should be

¹ This argument has been used by Dr. Goldenweiser with relation to Australian conditions.

lacking. Names of social units have been known to disappear; social units have been known to assume new functions; if the moiety developed according to Morgan's scheme, evidence of the exogamic character of the new clans must have disappeared. All such explanations remind one of the evolutionist's plea as to imperfections of the paleontological record. Such a plea is admissible where there is extraneous positive evidence, but does not fill the place of lacking evidence. In the case of evolution there is fortunately independent evidence; in our Iroquois case there is not. Hence, the unity of the Iroquois clan and moiety remains unproved, though not disproved.

The value of the foregoing discussion lies in several directions. For one thing it changes our view of the essence of the units commonly called clans and gentes. Whenever such units form part of larger exogamous units, we can no longer assume dogmatically that they, too, are at bottom exogamous. This, nevertheless, remains a possibility, and on that assumption we must change our conception of the moiety. The moiety, instead of being a subdivided exogamous clan, may be an association of exogamous clans constituting a unit of novel character even if it assumes the exogamous character once distinctive of the separate clans. And this again opens our eyes to all kinds of possibilities. We need no longer tug at all the facts of social organization in a vain effort to thrust them into the strait-jacket of "exogamy." We begin to suspect that various types of social units may peaceably coexist in the same tribe, some regulating marriage, some, other social activities; nay, some regulating marriage in one sense, others, in a different sense. In short, instead of the dull uniformity of the theorists, we may have all the motley variety of real life with its profusion of individual differences. To justify this pluralistic view, let us turn to some facts.

The Fox and Kickapoo are divided into exogamic gentes bearing animal names. So far these units, except for the rule of descent, correspond to the Iroquois clans. But in addition to their gentes both Fox and Kickapoo have a division into moieties that is utterly different from the Iroquois scheme. The Kickapoo child enters a moiety only after receiving a name.

The name comes from the father's name, unless the right of naming the child is handed over to the mother by the father. If the father is *uskaca*, then the offspring will be *uskaca*. If the mother is *kickō'a* and she has the right of giving the name, then the child is *kickō'a*. Again, the child can become a *kickō'a* if he is given to a grandmother, grandfather, sister's son, or a sister's daughter; the child gets his name from the one in whose hands he falls, and if the namer is a *kickō'a* the child will be a *kickō'a*.

Among the Fox the father usually, but not always, determines which division a child shall enter.

If he is a Tō'kān, it is likely his children will be the same. Often the first-born is the same as the father, and the next child is the other. No distinction is made on account of sex.¹

From an earlier account of the closely related Sauk it appears that consecutive children of the same father were placed into different moieties, the oldest into his father's, the next oldest into the complementary moiety, and so forth.² The Fox and Kickapoo moieties are distinguished by the use of different paint for personal decoration. Their sole function has been limited to that of divisions in athletic games, but according to Dr. Michelson, the Fox moieties had more serious (in part, ceremonial) duties. These moieties differ markedly from those of the Iroquois, not so much because of a difference in function, as in essential constitution. Functions may be assumed and lost. The moieties of the Fox might be supposed to have lost some of the characteristics found among the Iroquois, or the Iroquois moieties might be supposed to have originated as divisions similar to the Fox moieties and to have assumed additional duties. But the difference is more fundamental. While among the Iroquois *all* the members of several gentes are united in one moiety, this is contrary to the Fox scheme, where members of the same gens belong to opposite moieties, while either moiety probably joins together members of all the gentes. The problem that, however solved or however insoluble, naturally arises from the Iroquois facts, viz., whether the moiety is a sub-

¹ Jones, "Notes on the Fox Indians," *Journal of American Folk-Lore* (1911), pp. 216, 220; *idem.*, "Kickapoo Ethnological Notes," *American Anthropologist* (1913), p. 335. According to Dr. Michelson the firstborn child belongs to the moiety complementary to its father's, the second to its father's moiety, and so forth.

² McKenny and Hall, *History of the Indian Tribes of North America*, I, 117.

divided clan or an association of originally distinct clans, does not arise at all in connection with the Sauk and Fox. It would not even arise if the rule of descent were definitely patrilineal for the moiety as it is for the gens. For there is nothing to show that a man of gens *a* must belong to moiety *A*; and so long as there is no such definite correlation, the children of a given man, *Aa*, will indeed be also *Aa*, but will be joined for athletic purposes (or what not) by the children of *An*, who are also *An*. Consider Germans divided into Catholics (A) and Protestants (B). From the point of view of marriage the German Catholics form as definite an endogamous unit as the Fox gens forms an exogamous unit. But Germans are also divided into socio-economic groups, *a . . . n*, within which membership is in a measure hereditary, and when we are told that a German is of the landed gentry, a capitalist, a proletarian, etc., we do not know whether he is a Catholic or a Protestant, nor will it occur to us to ask, whether the religious division grew out of the economic division or vice versa.

An even more instructive case is furnished by the Yuchi, formerly resident in Georgia and Alabama but now settled in Oklahoma. Like the Fox, the Yuchi are divided into exogamous groups, though with them descent in these groups is matrilineal. Like the Fox again, the Yuchi are divided into moieties, but with the important difference that membership descends in the paternal line. Here again each moiety will thus embrace members of all possible clans and each clan will have members of both moieties. The functions of the Yuchi moieties are of great importance. Not only does the division during ball games follow moiety lines, but in every phase of ceremonial, military, and political life the moiety division appears more important than the clan division. The Chief moiety is associated with peace, the Warrior moiety with war. From among the Chiefs were chosen the highest public officials, while the Warriors took the initiative in setting out against the enemy. At the tribal ceremony the Chiefs cared for the medicine plants, while the Warriors presided over dances and games. As if to emphasize the distinctness of the moiety from the clan, there is a tendency—though not consistently carried out—for Chiefs to marry their daughters to other Chiefs rather than to Warriors.¹

¹ Speck, *Ethnology of the Yuchi Indians*, especially pp. 70-78.

In considering the social organization of the Yuchi, it would be monstrous one-sidedness to disregard the important dual division and emphasize only the exogamous clan unit.

But the social relations of individuals may be definitely determined, even without a definite grouping under the same group name. Among the Hidatsa there were formerly seven exogamous clans, four of which were grouped in one moiety, and the remainder in the complementary moiety. Membership in clan and moiety depended on one's mother's affiliations. But a Hidatsa's social activities were only in part dependent on his membership in the two units mentioned; in very large measure they depended on his father's membership. The ceremonial life of an individual was determined by his father's: he was obliged to purchase certain sacred objects from his own father, and with them membership in an esoteric ceremonial fraternity. Moreover, all the children of fathers belonging to the same clan were united in a group of "joking relatives" whose privilege it was not only to play practical jokes on any of the members of the group, but also publicly to upbraid any member offending against tribal custom. Of the Hidatsa, also, we may therefore say that their social organization is very imperfectly described by an account of the exogamous clan system: at any particular period the group of "joking relatives" and of the patrilineal esoteric brotherhood loomed as equally important social factors with one's own clan.

These few illustrations of different types of social units by no means exhaust the number found in North America. From among the most interesting ones I may add the castes of the Northwest coast, where tribes are divided into Chiefs, Noblemen, Commoners, and Slaves; and loose associations of clans into phratries with apparently few or no distinctive traits, which occur among the Crow. Instead of finding North American society built upon a single basis, the clan or gens (for in Morgan's scheme, I repeat, the phratry or moiety is only a segmented clan or gens), we have met the following varieties of social unit:

1. The exogamous clan or gens (Crow, Fox).
2. The clan or gens of indeterminate character as to exogamy, because it forms part of a larger exogamous unit (Iroquois).

3. The exogamous moiety composed of several clans or gentes (Iroquois).
4. The non-exogamous moiety composed of several clans or gentes (Hidatsa).
5. The non-exogamous moiety organized without relation to clans or gentes (Yuchi, Fox).
6. Phratries of indeterminate character (Crow, Kansas).
7. Castes (Northwest coast).
8. Ceremonial bodies in which membership is determined by descent (Hidatsa).

To these, on the basis of former considerations, we must add the family in more or less our sense of the term, for we found that both clan or gentile systems exist and where they do not exist there are social relations due to ties of blood-relationship independently of such systems.

To regard the exogamous one-sided kinship group as the sole basis of social organization in North America is thus an unjustifiable piece of anthropological folklore.

Finally, we must take up the question, whether the kinship group is everywhere fundamentally the same. To a certain extent this has already been answered. For if, on the one hand, clans are exogamous as such, like those of the Crow, while on the other hand they are only derivatively exogamous, as parts of other units that *are* exogamous in their own right, then, of course, whatever fundamental unity exists, exists, from Morgan's point of view, between the exogamous divisions and not between the divisions called clans. And as a definite unit must serve *some* purpose, the non-exogamous clan must have had some other characteristic that puts it in a different class from the exogamous clan. This being so, we must repudiate as dogmatic the assumption that wherever clan exogamy is found with other features the exogamous feature is the historically earliest trait with which the other traits afterward become associated. It is entirely possible that the course of development may in some cases have been as follows: There may have been a ceremonial group¹ at the beginning, with a rule of descent like that followed in the Hidatsa esoteric groups, viz., the rule that children buy their own father's medicines and mem-

¹ Or a group constituted for some other purpose. I adopt an example patterned as closely as possible on actual facts.

bership. The ceremonial group will thus come to consist of a number of patrilineal families. We need only the additional step that marriage shall be tabooed among fellow-members—a step that has been taken in ceremonial associations of a different type within the same area—to have a typical gens, with exogamy as the final instead of the fundamental feature of organization.

In the light of these considerations we shall not base any theory as to the fundamental unity, either historically or psychologically, between two given clan systems on the existence of exogamy in both, but shall take into account all the geographical, historical, and psychological factors that would be considered in any other ethnological comparison. Let us compare, for example, the clan concept of the Iroquois with that of the Crow. The Iroquois clan bears an animal name; has a distinctive set of personal names; and was once derivatively exogamous. The Crow clan is not named for an animal, but bears a nickname, such as “Sore-lip,” “Tied-in-a-Knot,” “Bad War Honors”; it has no set of personal names; and it is primarily exogamous, for it does not form part of a larger *exogamous* unit. This parallel becomes really significant when we view both systems in their geographic setting. Clans and gentes bearing names directly or indirectly referring to animals are found very widely distributed among the tribes east of the Mississippi and among the Southern Siouan tribes. The idea of nicknaming clans, gentes, or local bands is also definitely localized among the tribes of the Northwestern Plains—Assiniboiné, Dakota, Blackfoot, Crow. Practically all the tribes with animal-named divisions have associated with these divisions sets of distinctive personal names; among the Northwestern Plains tribes children are named either in commemoration of some exploit of a distinguished tribesman or according to a supernatural revelation, a method precluding clan sets of personal names. Finally, there is fair evidence of exogamy being a secondary clan feature among a number of Eastern Woodland and Southern Siouan tribes. The Iroquois, Winnebago, and Kansas are positively stated to have had exogamous *moieties*; for the Osage the same condition seems to have held formerly;^{*} for the Omaha there is at least some indication of pristine exogamy

* For this information I am indebted to Miss Gerda Sebbelov.

in the moiety. While the evidence on this point is far from convincing, a suspicion remains that in the area under discussion exogamy may have been primarily associated with the dual division. But in the Northwestern Plains area there is no reason for assuming that exogamy was anything but a phenomenon characteristic of the clan or gens, for the simple reason that the moiety does not occur among the Crow and Blackfoot, and the phratries of the Crow are historically a later development than the exogamous clan. The clans of the Iroquois and Crow are therefore not only radically dissimilar, but it appears that they represent two types of social unit distinctive of certain definite geographical areas. If kinship groups are not fundamentally alike even within the same continent, they will, a fortiori, not be fundamentally alike in different continents, as Dr. Goldenweiser has shown by a comparison of Australian and Northwest American kinship groups.¹ The theory that clans or gentes conform to a single basic concept thus breaks down utterly.

Our critique of Morgan has thus established the following conclusions:

1. Kinship groups tracing descent unilaterally are not found universally among primitive tribes.
2. It is not proved that the North American gentes developed out of clans.
3. Restrictions of marriage are not primarily determined by unilateral kinship groups, for they exist, on the basis of blood-relationship, where no such groups exist, and coexist where such groups do exist; kinship groups being absent precisely among the tribes of lowest culture (in North America).
4. The exogamous kinship group did not form the sole foundation of the social fabric among primitive tribes, where quite different units, such as the moiety, caste, etc., occur, often coexisting with the clan or gens.
5. The kinship group is a phenomenon of variable significance.

Every destructive criticism of a view sanctioned by tradition leaves its adherents with a sense of loss. This feeling is, of course,

¹ "Totemism, an Analytical Study," *Journal of American Folk-Lore* (1910), pp. 179-293.

an illusion, for there is no real loss when opinions are abandoned that are demonstrably false. But does modern ethnology, to use a hackneyed phrase, merely tear down without building up? To anyone acquainted even with the rudiments of psychology this question must seem very naïve. Synthesis is the most fundamental characteristic of consciousness: all the elementary operations of the human mind, such as the association of ideas, are described by psychologists, such as Höffding and Cornelius, as *synthetic* processes. Under these circumstances the fear that modern critical science will compile a chaotic mass of data by failing to correlate the isolated facts it ascertains is absurd. The kind of synthesis that some people dream of seems to be the method of insisting that things are alike which one knows to be different, and it is this kind of synthetic sleight-of-hand performance with which modern science will have nothing to do. Let us once more turn to the facts to see in what manner legitimate synthesis proceeds.

We find that the Crow are divided into clans of a certain type—an isolated fact. When we find subsequently that the Hidatsa have exactly the same type of clan we *spontaneously* bring this fact under the same heading as the first—we synthesize, in other words, our two findings. This spontaneous activity, owing to the very nature of human consciousness, must be supplemented by a systematic attempt at all conceivable correlations of fact. How did the Crow-Hidatsa clan originate? Is it a trait of human psychology to evolve just such a clan in every part of the globe? Or is such a development due to a peculiarity of the Crow and Hidatsa? Or has it been borrowed from certain other tribes, and if so, from what tribes? The formulation of every such problem is the synthesis of certain facts that were at first isolated, unsynthesized. But the synthesis consists solely in the formulation itself. If we find that a suggested correlation does not hold as a matter of fact, our method of procedure has nevertheless been synthetic, quite independently of the result. When Morgan assumes without question that the Iroquois clan and moiety are at bottom alike, he is not more synthetic but less synthetic than we who question the self-evident character of his assumption and thus suggest a new co-ordination of the facts.

The actual course of scientific progress is more enlightening on the subject of scientific method than the psychologically intelligible, but logically often indefensible, desire for simplicity. We must indeed seek the simplest, most economical representation of the facts, but the emphasis must be as strong on "facts" as on "economical" if we are to avoid producing merely a pleasing myth instead of a summary of reality. What does it mean when Faraday tells us that he crushed dozens of hypotheses in the silence of his laboratory? It means that, thoroughly saturated with the facts of his science, Faraday attempted all manner of correlations of phenomena, many of which could never have suggested themselves to one unacquainted with the same range of facts, and that, by a process of selection, those correlations suggested in his thinking to which there corresponded a real correlation in nature remained as his permanent contribution to science.

If anthropology is to be regarded as a science, it must conform to the logical methods of the exact sciences. Spontaneous synthesis of anthropological facts will be supplemented by systematic suggestion, verification, and elimination of all conceivable co-ordinations. In this work there will naturally be differences among anthropologists due to individual differences in knowledge of anthropological fact, individual differences in degree of synthetic faculty and of critical judgment. But can anthropology aspire to the exactness of sciences like physics and chemistry? As regards logical method, at least, I firmly believe it can; if I did not, I should regard it as a harmless mode of amusement or as a branch of *belles lettres* rather than as a branch of science.

One or two illustrations must suffice. Among several of the Plains Indian tribes there are graded clubs, the members of any one of which are of the same age and buy their place in the society. We have here, then, two factors on either of which membership may primarily depend—purchase and age. The question is, which is the fundamental correlation, membership and purchase, or membership and age? Let us make an experiment in thought. Provided membership is a function of age, then if we vary the age beyond a certain limit membership must cease. Provided membership is a function of purchase, it will cease only when sold.

Fortunately, our experiment in thought has been performed for us in reality. Among the Hidatsa and Mandan, individuals have preserved their membership in clubs regardless of advancing age, because they had had no opportunity to sell their membership; in this way some claim simultaneous affiliation with more than one organization, which of course would be impossible if these clubs were primarily age societies. Hence, membership is basically a function of purchase. Many theories of physicists as to the constitution of matter rest, I fear, on a less solid basis of fact and logic.

To take another case. Many primitive tribes use the same term in addressing relatives very differently related according to our notions of kinship. For example, the Crow call a father, a father's brother, the husband of a mother's sister or of a father's sister by the same term. They also use a single word in addressing a mother, a mother's sister, a father's sister, and the wife of a father's brother. From this we might infer that persons of the same generation and sex are addressed by the same kinship term. But while this conclusion is in large measure true, it does not state the whole truth. For a Crow will also address any father's clansman, no matter how young, as "father." Similarly, he will address any female of his father's clan, no matter how young, as his "mother." Now, as among the Crow descent is traced in the female line, any man, his sister, and her daughters and sons, her daughter's daughter, and all female descendants indefinitely must belong to the same clan. Hence, if I am a Crow, I ought to call my father's sister's daughter and all her female descendants "mother," and my father's sister's son "father," because all of them belong to my father's clan. This is actually the case, both among the Crow and the related Hidatsa. But how can we make sure that they are so called *because* of their clan? Obviously we must proceed again by keeping other possible causes constant and determining what happens when we eliminate the one cause under discussion. We must, therefore, find two relationships differing only as to clan affiliation. Now, while my father's sister's daughter and son belong to the same clan (which is also my father's), the daughter of my father's sister's son and the daughter of my father's sister's daughter will belong to different clans, since the former must follow her mother's clan.

Hence, we have here two relatives identical in sex and generation, but differing in clan. We have found that a Crow will call his father's sister's daughter's daughter "mother." Does he call his father's sister's *son's* daughter by the same term? He does not, calling her instead his "sister." In other words, when the clan factor is eliminated, a different factor becomes potent—the generation factor. For it seems clear that I use the term "sister" because the father of my "sister" is my "father" and because children of the same "father" are brothers and sisters.

There are no bounds to the synthetic co-ordination of ethnological facts along the lines here indicated. That, however, ethnological facts should admit of such simple wholesale summing up as certain (not all) groups of physical facts is an unreasonable demand. If ethnological laws of development exist, their discovery will doubtless be a great achievement. But we must be on our guard against "fake" laws that do not result from a synthesis of the *facts* but from an artificial simplification by selection of those facts that fall in with the investigator's fancies. It would be a great simplification of much physical calculation if bodies fell with an acceleration of 10 meters per second; but they perversely persist in falling with an acceleration of 9.81. So it would be charming if all tribes passed first through a loose, then through a clan, and finally through a gentile form of organization; unfortunately there is no evidence that many of them do. It has been said in Newton's praise that he did not attempt to astonish himself by his clever ideas about nature, but sought to know what nature was really like. In looking over ethnological literature we are frequently tempted to ask whether the writer's object is not solely to amaze himself and others by his own cleverness. But ethnology is rapidly coming of age, and we are learning to synthesize after the manner of Newton, in the expectation of raising, not a structure of new anthropological folklore, but a new anthropological science.